The Interface

Chronic Pain Syndromes and Borderline Personality

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This ongoing column is dedicated to the challenging clinical interface between psychiatry and primary care—two fields that are inexorably linked.

ABSTRACT

The assessment and management of chronic pain is challenging and, according to the existing literature, oftentimes associated with various forms of psychopathology, including borderline personality disorder. Since 1994, eight studies have explored the relationship between chronic pain syndromes and borderline personality disorder. In averaging the prevalence rates in these studies, 30 percent of participants with chronic pain harbor this Axis II disorder. Related studies suggest that individuals with borderline personality disorder report higher levels of pain than those without this personality dysfunction; older, rather than younger, patients with borderline personality disorder are more likely to have higher pain levels; patients with borderline personality disorder in remission use significantly less pain medications; medical disability status in chronic pain does not necessarily differ between those with versus without borderline personality disorder; and the first-degree relatives of individuals with borderline personality disorder demonstrate statistical coaggregation with somatoform pain disorder. Why might chronic pain demonstrate associations with borderline personality disorder? Perhaps chronic pain is simply another manifestation of the inability of individuals with borderline personality disorder to self-regulate (i.e., the inability to regulate pain). In addition, pain symptoms may function as an interpersonal means of eliciting caring responses from others. Regardless, the assessment and treatment implications of these comorbid patients suggest a challenging scenario for both mental health and primary care clinicians.

KEY WORDS

Axis II, borderline personality, borderline personality disorder, chronic pain, Cluster B, pain

INTRODUCTION

The assessment and management of chronic pain is a challenging issue in medicine—one that is complicated by the variable interface between pain and various forms of psychopathology. Indeed, relationships between chronic pain and psychiatric disorders have been examined and documented in a number of studies to date,

particularly with regard to mood and anxiety disorders.[1] However, the relationship between chronic pain and personality disorders has been notably less explored. This observation is somewhat peculiar given that in 1999, Weisberg and Vaillancourt[2] affirmed a long-recognized relationship between chronic nonmalignant pain and certain personality disorders.

In this edition of The Interface, we examine the relationship between diverse types of chronic pain and one specific personality disorder—borderline personality disorder (BPD). We will first present studies reporting the prevalence rate of BPD in various chronic pain populations. We will then review studies with associated themes related to chronic pain and BPD as well as speculate on possible explanations for this particular association. We will conclude by briefly reviewing the possible assessment and treatment implications of this type of comorbidity.

STUDIES ON THE PREVALENCE OF BPD IN CHRONIC PAIN PATIENTS

Using search terms such as *borderline*, *borderline personality*, *personality disorders*, *Axis II*, and *pain*, we undertook a literature search of the PubMed and PsycINFO databases for articles reporting the prevalence of BPD among samples of patients with various types of chronic pain syndromes. In deploying this strategy, we excluded articles published before 1994 (i.e., the publication date of the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition*[3]) in an effort to capture more contemporary assessments for BPD. As a caveat, we excluded articles written in foreign languages if the English abstract was insufficient to retrieve data. In using this approach, we may have missed some studies. However, we were able to successfully locate eight articles on this topic (Table 1).[4–11]

In summarizing the data in Table 1, we located eight studies published between the years 1994 and 2011. Most of these studies consist of samples from the United States. Study samples are diverse and include participants from community, primary-care, and tertiary-care settings. Sample sizes vary from 17 to 1,323 participants, with the total number of participants in all eight studies being 3,041. The range of reported percentages for the prevalence of BPD is between 9.4 and 58 percent. In averaging all of the reported percentages in Table 1 (i.e., if a given study used 3 assessment measures, each percentage was included in the total tally), the averaged prevalence of BPD in these collective studies is 30 percent. This resulting percentage is confidently reinforced by the Dersh et al study,[7] which examined the largest sample of chronic-pain patients to date (N=1,323) and found a BPD prevalence rate of 27.9 percent. To summarize, the findings from our review suggest that approximately 30 percent of chronic-pain patients suffer from comorbid BPD.

ASSOCIATED STUDIES ON THE RELATIONSHIP BETWEEN CHRONIC PAIN AND BPD

In addition to studies examining explicit prevalence rates of BPD in a given chronic-pain population, we also encountered several studies of related interest. The following data further clarify the relationship between chronic pain and BPD.

The presence of BPD appears to intensify pain scores. According to several controlled studies, compared to chronic-pain patients without BPD, those with this Axis II disorder consistently report higher pain ratings. For example, in a study from the United States, Tragesser, Bruns, and Disorbio[12] examined 777 individuals who were in rehabilitation for pain, and found that the subsample with BPD reported greater pain severity, including higher levels of minimum and maximum pain during the past month. We examined 80 internal medicine outpatients and found statistically significant correlations between self-rated pain score, both with current pain and pain over the past 12 months, and scores on three self-report measures of BPD.[13] Frankenburg and Zanarini[14] compared BPD patients in remission (n=200) to those still evidencing active symptoms (n=64). Among participants in remission, there were significantly fewer "syndrome-like" conditions, such as fibromyalgia and temporal-mandibular joint syndrome, as well as less back pain. These three studies suggest that BPD patients tend to report higher pain levels than patients without BPD.

Older patients with BPD evidence higher pain levels than younger patients with BPD. In a study by Blum et al,[15] investigators examined 163 patients with BPD who were recruited for a clinical trial at an academic center. In comparing younger to older patients, older patients with BPD reported greater pain levels and tended to use more healthcare resources.

BPD patients in remission use less pain medication. In the previously discussed study by Frankenburg and Zanarini,[14] BPD patients in symptom remission were significantly less likely to exhibit the sustained use of pain medications. This pattern extended to hypnotic medications, as well.

BPD status in chronic pain patients does not necessarily correlate with medical disability.

TABLE 1. Studies examining the prevalence of borderline personality disorder among various samples of pain patients

First Author/Year of Publication	Country of Origin	Sample Description	Sample Size	Assessment of Borderline Personality	Prevalence of Borderline Personality
Gatchel[4]/1994	United States	Tertiary care patients/ chronic low back pain disability	152	Structured Clinical Interview for DSM—Personality Disorders	26.90%
Sansone[5]/2001	United States	Primary care patients/ various chronic pain symptoms	17	Personality Diagnostic Questionnaire-4	47.10%
				Self-Harm Inventory	29.40%
				Diagnostic Interview for Borderlines	47.10%
Manchikanti[6]/2002	United States	Tertiary care patients/ chronic pain patients (2 subgroups)	150	Millon Clinical Multiaxial Inventory III	10% and 12%
Workman[6]/2002	United States	Patients referred to a physical therapy pain management program	26	Personality Diagnostic Questionnaire- Revised	31%
Dersh[8]/2006	United States	Tertiary-care patients/ chronic disabling occupational spinal disorders	1,323	Structured Clinical Interview for DSM—Personality Disorders	27.90%
Braden[9]/2008	United States	Community sample/ positive for lifetime self-reported pain	1,208	International Personality Disorder Examination screening questionnaire	27.40%
Sansone[10]/2009	United States	Tertiary care patients/ various chronic pain symptoms	117	Personality Diagnostic Questionnaire-4	9.40%
				Self-Harm Inventory	14.50%
Fischer-Kern[11]/2011	Germany	Tertiary care patients/ various chronic pain symptoms	48	Structured Interview of Personality Organization	58%

DSM: *Diagnostic and Statistical Manual of Mental Disorders*

In a study of 117 chronic pain patients being seen by a pain specialist in a private-practice setting, we found no statistically significant difference between those with versus without medical disability, and the prevalence of BPD.[16]

First-degree relatives of patients with BPD have high rates of somatoform pain disorders. In a study by Zanarini et al,[17] researchers examined the psychopathology of 1508 first-degree relatives of 341 patients with BPD. Using structural models for familial coaggregation, BPD coaggregated with, among other psychiatric diagnoses, somatoform pain disorder. This finding suggests that the families of patients with BPD have more functional pain syndromes than the family members of individuals without BPD.

POSSIBLE PSYCHOLOGICAL EXPLANATIONS FOR THE ASSOCIATION BETWEEN CHRONIC PAIN AND BPD

Harper observed that, "…it [is] particularly difficult for…[the borderline patient]…to endure prolonged acute pain…the borderline patient's tolerance of discomfort will typically be of shorter duration than other individuals".[18] Despite this resolutely stated impression, the explicit psychological relationship between chronic pain and BPD remains elusive.

One possible, at least partial, explanation may reside in the fundamental dynamics of BPD. This Axis II disorder is distinctly characterized by longstanding and pervasive self-regulation difficulties.[3] In turn, an inherent difficulty with self-regulation could subsequently manifest in a number of different self-regulatory symptoms or syndromes. For example, if an individual with BPD is unable to regulate him- or herself on an oral level, subsequent symptoms might include eating disorders (e.g., anorexia or bulimia nervosa, binge eating disorder, obesity) and/or alcohol/substance use problems. If an individual with BPD is unable to regulate him- or herself on a sexual level, promiscuity might develop. Likewise, if an individual with BPD is unable to regulate him- or herself with regard to pain, chronic pain syndromes might emerge.[19]

In addition to the possibility of chronic pain manifesting as a by-product of the characteristic self-regulation difficulties encountered in BPD psychopathology, the symptoms, themselves, may be self-reinforcing. To further explain this, the symptoms in BPD, regardless of type, are oftentimes used to interpersonally engage others.[20] In the context of pain, the symptoms may be consciously or unconsciously used to elicit caring responses from others.[21] As a result, this process enables the patient with BPD to elicit emotional support from others without having to develop mature longitudinal relationships (i.e., pain enables one to garner support and dependency without vulnerability).

ASSESSMENT AND TREATMENT IMPLICATIONS

Given the high rates of comorbid BPD in patients with chronic pain, we suggest that clinicians screen every chronic-pain patient for this Axis II disorder. We have described effective screening approaches to BPD, elsewhere, which include informal brief interviews as well as various one-page self-report measures.[21]

While the treatment implications of chronic pain in the presence of comorbid BPD remain empirically unknown, the broader literature in the area of BPD and Axis I comorbidity suggests that this Axis II disorder has a negative impact on a patient's overall prognosis.[22] From a general clinical perspective, compared with non-BPD patients, patients with chronic pain and BPD may appear to have exaggerated pain experiences, request higher levels of analgesics, and exhibit lower responses to typical analgesic treatment. In addition, given the tendency of individuals with BPD to have relatively high rates of substance misuse,[23] we strongly suggest an overall conservative management approach with regard to analgesic medications.

CONCLUSION

According to the eight published studies since 1994, the approximate prevalence of comorbid BPD among patients with various forms of chronic pain is 30 percent. Compared to chronic pain patients without BPD, those with BPD consistently evidence higher pain scores. In addition, pain may be more pronounced among older rather than younger patients with BPD; BPD patients who are in remission appear to use less analgesic medications; individuals with BPD and chronic pain do not appear to exhibit higher rates of medical disability than non-BPD patients with chronic pain; and among the first-degree relatives of patients with BPD, there is a coaggregation of somatoform pain disorders. While the explicit psychological explanation for the identified association between chronic pain and BPD is unknown, there are at least two possibilities: 1) in some patients with BPD, chronic pain may simply be a manifestation of the characteristic self-regulation difficulties encountered in patients with this Axis II disorder; and/or 2) chronic pain symptoms may be consciously or unconsciously pronounced in an attempt to elicit caring responses from others. As expected, this type of comorbidity suggests a dampening of the patient's overall prognosis. Only further research will tease out the nuances of the relationship between chronic pain and BPD—a relevant topic for both psychiatrists and primary care clinicians.

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